

Bridge Culvert Inspection				
Bridge File Number	09523 -1 Bridge Culvert		Form Type	CUL1
Year Built	1987		Lot No.	3
Bridge or Town Name	WATER VALLEY		Inspector Name	Owen Salava
Located Over	SILVER CREEK, 3.89.25, WATERCRS-ST		Inspector Class	BR CLS A
Located On	579:02 C1 31.646		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	09-Aug-2011
Legal Land Location	NE SEC 26 TWP 29 RGE 6 W5M		Data Entry By	Marcia Chavez
Longitude, Latitude	-114:43:59, 51:30:53		Data Entry Date	16-Sep-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA28		Review Date	15-Aug-2011
Clear Roadway/Skew	11 / 26 deg. (RHF)		Dept. Reviewer Name	Andrew Smikles
AADT/Year	200 / 2010 (A)		Dept. Review Date	19-Sep-2011
Road Classification	RCU-209G-90		Follow-Up By	
Detour Length (km)				

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	3658	SP	38.4	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	South ditch.		Gas
Power			Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		5	5	Curves @ both ends. Limited sight distance, superelevated.
Vertical Alignment		6	6	
Roadway Width (m)	11.000			
Embankment		7	7	
Sideslope ( _ :1)	4.0			
(Height of Cover(m) : 1)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>5</b>	<b>5</b>	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Narrow cracks.
Collar		7	7	Medium width cracks.
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		7	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>450</b> )				
Scour/Erosion		7	7	Some 600mm rock @ banks 15m U/S.
Beavers (Y/N)	No			Old beaver dam U/S partially opened but acts as guidebank & forces flow to scour out NE bank. Remove remainder of dam.
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3658, Type: SP)				
Barrel Last Accessible Date	09-Aug-2011			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	
Measured Rise (mm)				
Measured At Ring No.				Estimate, 0.5m water/silt.
Sag (mm)	162			
Percent Sag	4			
Sidewall		7	7	
Measured Span (mm)	3820			
Measured At Ring No.	5			
Deflection (mm)	162			
Percent Deflection	4			
Floor		N	N	Deep silt/rocks with 500mm water on floor.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		5	5	1 bolt loose @ R5 @ roof. 25mm gap @ this location.
Separation (mm)	25			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	Minor superficial corrosion @ bevels.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3658, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		8	8	Rocks in U/S bevel.
Baffle		X	X	
(Type : )				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>7</b>	<b>7</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			Sides pushed in 250mm.
Above/Below (mm)	200			
Scour Protection		5	5	Bevel projects from rock 300 to 500mm.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 600)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		6	6	
Bank Stability		4	4	Cutbanks d/s sloughing - see u/s "Beaver" comments.
HWM (m below Top of Culvert)	2.0			(03/Oct/2002)
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>4</b>	<b>4</b>	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2012	Remove beaver dam U/S.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>77.8/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>74.2/75.7</b>	Est. Repl. Yr	2040	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2006.07.28 With normal maintenance culvert should be good until 2050.						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Dave Lam		Previous Assistant's Name				
Next Inspection Date	09-Nov-2014		Previous Inspection Date	01-Oct-2009			
Inspection Cycle (Default) (months)	39						
Comment							